

THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1 - 10 (Cancelled)

11. (Currently Amended) A control device in which apparatus management data is transmitted and received to and from an apparatus by a first communicating unit, and a packet addressed to a centralized management device is sent out to a communication network and a packet from the communication network addressed to itself is taken in by a second communicating unit, said control device comprising:

a clock for providing current date and/or time;

an analyzing unit for analyzing the packet taken in by said second communicating unit;

an expiration date and/or time managing unit for permitting transmission of the apparatus management data included in the packet to said apparatus on condition that the current date and/or time obtained from said clock is not past an expiration date and/or time of the packet analyzed by said analyzing unit, and for transmitting a notice, which indicates the invalidity of the apparatus management data, to the centralized management device on condition that current date and/or time obtained ~~from~~ from said clock is past said expiration date and/or time; and

a threshold ~~value~~ date and/or time storing unit for holding threshold ~~value~~ date and/or time information deciding a time period for which the apparatus management data is valid,

wherein said expiration date and/or time managing unit determines whether or not the current date and/or time is not past the expiration date and/or time based on a transmission date and/or time included in the packet analyzed by said analyzing unit, the threshold ~~value~~ date and/or time information held by the threshold ~~value~~ date and/or time storing unit and the current date and/or time obtained from said clock.

12. (Currently Amended) A control device as claimed in claim 11, wherein said threshold ~~value~~ date and/or time storing unit holds threshold ~~value~~ date and/or time information deciding an expiration date and/or time of each apparatus management data.

Claims 13 - 14 (Cancelled)

15. (Currently Amended) A management system that manages apparatuses connected to a plurality of apparatus management devices by transmitting and receiving a packet including apparatus management data between a centralized management device and the apparatus management devices via a communication network,

wherein said centralized management device comprises:

an expiration date and/or time setting unit for setting expiration date and/or time information of the apparatus management data; and

a communication network for sending out to the communication network a packet being addressed to a specified apparatus management device and including expiration date and/or time information from the expiration date and/or time setting unit, and taking in a packet from the communication network addressed to itself, and

wherein each of said plurality of apparatus management devices comprises:

a first communicating unit for transmitting and receiving the apparatus management data to and from the apparatus;

a second communicating unit for sending out a packet addressed to said centralized management device to the communication network, and taking in a packet from the communication network addressed to itself;

a clock for providing current date and/or time;

an analyzing unit for analyzing the packet taken in by said second communicating unit;

a threshold ~~value~~ date and/or time storing unit for holding threshold ~~value~~ date and/or time information deciding a time period for which the apparatus management data is valid; and

an expiration date and/or time managing unit for permitting transmission of the apparatus management data included in the packet to the apparatus connected to said apparatus management device on condition that the current date and/or time obtained from said clock is not past an expiration date and/or time obtained from transmission date and/or time information included in the packet analyzed by said analyzing unit and the threshold ~~value~~ date and/or time information held by said threshold ~~value~~ date and/or time storing unit, and for transmitting a notice, which indicates the invalidity of the apparatus management data, to the centralized management device on condition that current date and/or time obtained from said clock is past said expiration date and/or time.

16. (Currently Amended) A controlling method comprising the steps of:

receiving a mail transmitted from a management unit via a communication network;

providing current date and/or time from a clock;

storing threshold ~~value~~ date and/or time information deciding a time period for which the received mail is valid;

analyzing the received mail to determine validity of the received mail, the received mail being valid when the current date and/or time obtained from said clock is not past an expiration date and/or time obtained from transmission date and/or time information included in the received mail and the threshold ~~value~~ date and/or time information; and

controlling an apparatus based on the received mail when the validity of the mail has not expired and for transmitting a notice, which indicates the invalidity of the mail, to the management unit when the validity of the mail has expired.

Claims 17 & 18 (Cancelled)

19. (Currently Amended) A control device for controlling an image forming apparatus comprising:

a receiving unit which receives a command from a management device via a communication network;

a clock for providing current date and/or time;

a threshold ~~value~~ date and/or time storing unit for holding threshold date and/or time information representing ~~the~~ a time period for which the command is valid;

a decision unit which decides whether or not the validity of the command has expired, the command being valid when the current date and/or time obtained from said clock is not past an expiration date and/or time obtained from transmission date and/or time information included in the command and the threshold date and/or time information; and

a control unit which sends the command to the image forming apparatus so that the image forming apparatus performs the command when the decision unit decides that the validity of the command has not expired, wherein

the control unit sends information, which indicates the invalidity of the command, to the management device via the communication network when the decision unit decides that the validity of the command has expired.

20. (Cancelled)

21. (Previously Presented) A control device as claimed in claim 19, wherein the control unit does not control the management device based on the command when the decision unit decides that the validity of the command has expired.

22. (Previously Presented) A control device as claimed in claim 19, wherein the command is a command to change a setting condition of the image forming apparatus or a command to request an operation of the image forming apparatus.

23. (Currently Amended) A controller comprising:

a receiving unit receiving from a center device a transmission date and/or time and command data in a packet form;

a threshold ~~value~~ date and/or time storing unit for holding threshold date and/or time information representing ~~the~~ a time period for which the command is valid;

a clock for providing current date and/or time;

a control unit for transmitting the command data to the apparatus on condition that the current date and/or time obtained from the clock is not past expiration date and/or time obtained from the transmission date and/or time and the threshold date and/or time information and for transmitting a notice, which indicates the invalidity of the command data, to the center device on condition that the current date and/or time obtained from the clock is past the expiration date.

24. (Currently Amended) A management system for managing at least one of apparatus via a network, the management system comprising:

(a) a center device for managing apparatuses, the center device comprising:

(a-1) a center transmitting unit for transmitting transmission date and/or date and/or time and command data in a packet form;

(b) an terminal device for relaying the command data between the center device and the apparatus, the terminal device comprising:

(b-1) a terminal receiving unit for receiving the transmission date and/or time and the command data from the center device,

(b-2) a threshold ~~value~~ date and/or time storing unit for holding threshold ~~value~~ date and/or time information representing ~~the~~ a time period for which the command is valid,

(b-3) a clock for providing current date and/or time, and

(b-4) a control unit for transmitting the command data to the apparatus on condition that the current date and/or time obtained from the clock is not past expiration date and/or time obtained from the transmission date and/or time and the threshold date and/or time information and for transmitting a notice,

which indicates the invalidity of the command data, to the center device on condition that the current date and/or time obtained from the clock is past the expiration date and/or time; and

(c) an apparatus comprising:

(c-1) a apparatus receiving unit for receiving the command data,

and

(c-2) a apparatus control unit for controlling the apparatus corresponding to the command data.

25. (Currently Amended) A controller comprising:

a receiving unit receiving from a center device command data including at least one of a transmission date and/or time and a first expiration date and/or time;

a threshold ~~value~~ date and/or time storing unit for holding threshold date and/or time information representing the a time period for which the command is valid;

a clock for providing current date and/or time;

a decision unit for ~~decision~~ deciding whether or not the command data received by the receiving unit includes the first expiration date and/or time, and

a controller unit for transmitting the command data to an apparatus, wherein

when the decision unit decides that the command data include the first expiration date and/or time, the control unit permits transmission of the command data to the apparatus on condition that the current date and/or time obtained from the clock is not past the first expiration date and/or time, and

when the decision unit decides that the command data does not include the first expiration date and/or time, the control unit permits transmission of the command data to the apparatus on condition that the current date and/or time obtained from the clock is not past a second expiration date and/or time obtained from the transmission date and/or time and the threshold date and/or time information.

26. (Previously Presented) The controller according to the claim 25, wherein

when the decision unit decides that the command data include the expiration date and/or time, the control unit transmits a notice, which indicates the invalidity of the command data, to the center device on condition that the current date and/or time obtained from the clock is past the first expiration date and/or time, and

when the decision unit decides that the command data include the expiration date and/or time, the control unit transmits a notice, which indicates the invalidity of the command data, to the center device on condition that the current date and/or time obtained from the clock is past the second expiration date and/or time.

27. (Currently Amended) A management system for managing at least one of apparatus via a network, the management system comprising:

(a) a center device for managing ~~apparatuses~~ the at least one apparatus, the center device comprising:

(a-1) a center transmitting unit for transmitting command data including expiration date and/or time in accordance with ~~the~~ a kind of ~~the~~ command;

(b) an terminal device for relaying the command data between the center device and the at least one apparatus, the terminal device comprising:

(b-1) a terminal receiving unit for receiving the command data from the center device,

(b-2) a clock for providing current date and/or time, and

(b-3) a control unit for permitting transmission of the command data to the at least one apparatus on condition that the current date and/or time obtained from the clock is not past the expiration date and/or time; and

(c) ~~an~~ the at least one apparatus comprising:

(c-1) a an apparatus receiving unit for receiving the command data, and

(c-2) a a apparatus control unit for controlling the at least one apparatus corresponding to the command data.

28. (Previously Presented) A management system according to claim 27, wherein the control unit transmits a notice, which indicates the invalidity of the command data, to the center device on condition that the current date and/or time obtained from the clock is past the expiration date and/or time.

29. (Currently Amended) A controlling method comprising the steps of:

receiving from a center device command data including at least one of a transmission date and/or time and a first expiration date and/or time;

storing threshold date and/or time information representing ~~the~~ a time period for which the command is valid;

providing current date and/or time;

deciding whether or not the command data received by the receiving unit includes the first expiration date and/or time, and

transmitting the command data to an apparatus, wherein in the step of deciding,

when the command data includes the expiration date and/or time, the transmission of the command data to the apparatus is permitted on condition that the current date and/or time obtained from the clock is not past the first expiration date and/or time, and

when the command data does not include the expiration date and/or time, transmission of the command data to the apparatus is permitted on condition that the current date and/or time obtained from the clock is not past a second expiration date and/or time obtained from the transmission date and/or time and the threshold date and/or time information.

30. (Currently Amended) A method of managing at least one of apparatus via a network comprising the steps of:

transmitting command data from a center device, the command data including expiration date and/or time in accordance with the kind of the command; and

receiving the command data at a terminal device and relaying the command data to the at least one apparatus, wherein

the terminal device performs the steps of:

receiving the command data from the center device,

providing current date and/or time from a clock, and

permitting transmission of the command data to the at least one apparatus
on condition that the current date and/or time obtained from the clock is not past
the expiration date and/or time; and
the at least one apparatus performs the steps of:
receiving the command data, and
controlling the at least one apparatus corresponding to the command data.